

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
HADASSA WATERMAN  
G. E. EHRLICH (1995) LTD.  
11 MENACHEM BEGIN STREET  
RAMAT GAN, ISRAEL 52 521

## PCT

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 32328		Date of mailing (day/month/year) <b>01 NOV 2007</b> <b>FOR FURTHER ACTION</b> See paragraph 2 below	
International application No. PCT/IL06/00840	International filing date (day/month/year) 19 July 2006 (19.07.2006)	Priority date (day/month/year) 28 June 2006 (28.06.2006)	
International Patent Classification (IPC) or both national classification and IPC IPC: Please See Continuation Sheet USPC: 382/128;345/420;702/156			
Applicant SPECTRUM DYNAMICS LLC			

1. This opinion contains indications relating to the following items:

- ☒ Box No. I      Basis of the opinion
- ☐ Box No. II      Priority
- ☐ Box No. III      Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV      Lack of unity of invention
- ☒ Box No. V      Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI      Certain documents cited
- ☐ Box No. VII      Certain defects in the international application
- ☐ Box No. VIII      Certain observations on the international application

#### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.  
For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Date of completion of this opinion 24 September 2007 (24.09.2007)	Authorized officer Yon Couso Telephone No. (703) 305-4700 
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Form PCT/ISA/237 (cover sheet) (April 2005)

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IL06/00840

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed  
☐ a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☐ on paper  
☐ in electronic form

c. time of filing/furnishing

- ☐ contained in the international application as filed.  
☐ filed together with the international application in electronic form.  
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/IL06/00840

**Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims <u>1-95</u>	YES
	Claims <u>NONE</u>	NO
Inventive step (IS)	Claims <u>1-95</u>	YES
	Claims <u>NONE</u>	NO
Industrial applicability (IA)	Claims <u>1-95</u>	YES
	Claims <u>NONE</u>	NO

2. Citations and explanations:

Claims 1-95 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest method for stabilizing the reconstruction of an images volume by performing an analysis of reliability of reconstruction of a radioactive-emission density distribution of the volume from radiation detected over a specified set of views and defining modification to at least one of a reconstruction process and a data collection process to improve the reliability of reconstruction, in accordance with the analysis.

Claims 1-95 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IL06/00840

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of IPC:

G06K 9/00( 2006.01);G06T 17/00( 2006.01);G01B 5/26( 2006.01)

G06K 9/36( 2006.01);G01B 11/28( 2006.01)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In re Application of.:**

Michal AMIT et al

Serial No.: 10/581,455

Filed: June 1, 2006

Group Art Unit: 1632

**For: METHODS OF GENERATING STEM CELLS AND EMBRYONIC BODIES CARRYING DISEASE-CAUSING MUTATIONS AND METHODS OF USING SAME FOR STUDYING GENETIC DISORDERS**

Attorney Docket: 32059

Examiner: Ton, Thaian N

**Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

**DECLARATION UNDER 37 CFR 1.131**

We, Michal Amit and Joseph Itskovitz Eldor, are co-inventors of the above-identified application.

We have read the Office Action dated March 2, 2009 issued with respect to the above-identified application.

In the Office Action, the Examiner rejected claims 52, 55, 56, 58-60 under 35 U.S.C. 102(a) as being anticipated by Zwaka et al. (Nature Biotechnology, 21: 319-321, March 2003, Published online on February 10, 2003) or by PGPub US 2006/0128018 (Zwaka et al., Published June 15, 2006; filed February 6, 2004, earliest priority from February 7, 2003).

In re Application of: Michal Amit et al.  
Serial No.: 10/581,455  
Filed: June 1, 2006  
Office Action Mailing Date: March 2, 2009

Examiner: Ton, Thaian N  
Group Art Unit: 1632  
Attorney Docket: 32059

We hereby declare that the aforementioned publications of Zwaka et al. 2003 (Nature Biotechnology) and Zwaka et al., US 2006/0128018 are not prior art to our invention, inasmuch as we, Michal Amit and Joseph Itskovitz Eldor, had actually reduced to practice, and thus made our invention, prior to February 7, 2003, the earliest priority date of US 2006/0128018.

In evidence of such reduction to practice we attach herewith a copy of the *Amit et al.* (Chapter 7: Subcloning and Alternative Methods for the Derivation and Culture of Human Embryonic Stem Cells from Human Embryonic Stem Cells, Ed. A.Y. Chiu and M.S. Rao. January 1, 2003, pp. 127-144) publication, which describes Applicants own work (see attached declaration of Prof. Joseph Itskovitz Eldor under 1.132) having an earlier publication date of January 1, 2003, describing the successful reduction to practice of the claimed invention.

In re Application of: Michal Amit et al.  
Serial No.: 10/581,455  
Filed: June 1, 2006  
Office Action Mailing Date: March 2, 2009

Examiner: Ton, Thaian N  
Group Art Unit: 1632  
Attorney Docket: 32059

We hereby declare that all the statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and the such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: June 1, 2009.

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Dr. Michal Amit

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Prof. Joseph Itskovitz Eldor

***Enclosures:***

Declaration under 1.132 by Joseph Itskovitz Eldor

*Amit et al.* 2003 (Chapter 7)